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October 25, 2002

TO:

Minerals File

www.nr.utah.gov

FROM:

RE:

Lynn Kunzler, Senior Reclamation Specialist 4 1 Site Inspection Star Stone Quarries, Inc. Cotton Thomas Quarry, M/003/024, Box Elder

County, Utah

Date of Inspection:

September 11, 2002

Time of Inspection:

8:30 a.m.

Conditions:

Partly cloudy, warm

Participants:

Lynn Kunzler, DOGM

Purpose of Inspection: To investigate reports that the disturbed area has expanded and document current

disturbance.

## Background:

This operation began as a small mining operation in 1994. An inspection in June of 1997 found that this site had expanded beyond the 5-acre limit for a small mining operation. A Notice of Intention to Conduct Large Mining Operations was submitted in January of 1998. After several reviews, the Division issued tentative approval on August 8, 2000. Final approval was issued on May 1, 2001. The approved plan included a total of 66.32 acres of disturbance (of which 24.71 acres are access roads). The Division granted variances to reclamation for 10.72 acres (9.06 acres of road, which makes a loop between the camp, Autumn Gold and Buckskin Pits, and the 1.66- acre camp area). A total of 2.18 acres of road between the Buckskin and the Autumn Gold pits have been reclaimed and were released in 2001. Soil materials were to be salvaged from the Klondike Gold, Aspen Frost, Buckskin, North Granite and Antique White Quarries.

#### Observations:

Since permit approval, operations have been active in the North Granite, the Buckskin, the Autumn Gold, the Aspen Frost and the Klondike Gold pits. There has been no apparent stone removal from the Little Heart, the Windridge Rubble, the Antique White, the West Granite, the East Granite or the South Granite pits. Also, while being active, there has been little, if any, increase in the size of the camp area or the North Granite Pit since the permit was approved.

New road disturbances (since the permit was issued) include a new road between the Buckskin and North Granite pits. This road was approved in the plan at an estimated 2.66 acres of disturbance. The constructed road was found to be longer and wider than what had been proposed and approved, disturbing a total of 4.36 acres. Another new road (not in the approved plan) was observed between the Autumn Gold and Klondike Gold pits, which involves 0.91 acres. Several roads were also



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widened to construct (assumed) MSHA-required safety berms (this was not in the approved plan, nor has the plan been amended to include this increased width). Total road disturbances (including the proposed road between the Windridge Rubble and Mahogany Draw) for this site involve 28.49 acres (2.18 acres of which has been reclaimed and released).

New pit disturbances include additional acreage at the Buckskin Pit (4.91 acres, of which 4.41 acres are outside the approved disturbance area), the Autumn Gold Pit (3.45 acres, of which 1.15 acres are outside the approved disturbance area), and the Klondike Gold and Aspen Frost Pits (4.57 acres, of which 3.39 acres are outside the approved disturbance area). The attached map and table (Cotton Thomas Disturbances) summarizes the current and permitted acreage for this permit. Please note, the permitted acreage (66.32 acres) and unauthorized disturbance (12.63 acres) now total 79.05 acres, of which 2.18 acres has been reclaimed and released.

Soil materials were to be salvaged from new disturbances at the Buckskin, Klondike Gold, Aspen Frost and North Granite Quarries as they expanded. Soil material stockpiles were only observed at the North Granite Pit area.

Several photos were taken to document site conditions.

#### Conclusions:

Apparently, Cotton Thomas Quarry is not being operated in accordance with the approved plan. Not only has the disturbed area exceeded the permitted acreage by 12.63 acres of disturbance. Soil materials are not being salvaged. While some of this disturbance apparently is a result of constructing safety berms along access roads, the operator should have amended his plan to include the increased area. Also, the plan should have been amended prior to increasing the Buckskin, Klondike Gold and Aspen Frost pits beyond the approved footprints for these pits. The operator should be required to revise his plan at this time. Also, soil materials that should have been salvaged needs to be mitigated.

#### Recommendations:

The operator should be sent a Notice of Non-Compliance. The notice should identify operating outside the permitted area; increasing the disturbed area beyond the approved area without first obtaining Division approval; not providing an acceptable form and amount of reclamation surety prior to expanding the disturbance beyond the approved acreage; and failure to salvage existing soil materials for use in reclamation. Mitigation should require submission of a permit revision to include the increased disturbance, and a re-adjustment of the reclamation surety to include the increased acreage. Obtain and stockpile on site sufficient soil resources to make up for the current lack of soil salvage. The operator should also permanently mark the boundary of the approved large mining operations.

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Attachments: Cotton Thomas Quarry Map, Cotton Thomas Disturbances Table

cc: Lon Thomas, Star Stone Quarries, Inc., w/attachments

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# Star Stone Quarries, Inc. Cotton Thomas Quarry M/003/024

## Cotton Thomas Disturbances as of September 11, 2002

Roads (description)		Width	length (feet)	Acreage
Road 1	Loop - (camp-autumn gold-buckskin-camp)	20	21445	9.85 *
Road 2	Camp to Antique White	18	1849	0.76 **
Road 3	Camp to Autumn Gold	14	3728	1.20
Road 4	Autumn Gold to Klondike Gold	18	2195	0.91 ***
Road 5	From Road #1 to Little Heart	16	1047	0.38
Road 6	From Road #1 to Windridge Rubble	20	2842	1.30
Road 7	Buckskin to Road #8 (via so. granite)	18	1827	0.75
Road 8	Road #9 to North Granite (via w. granite)	16	6603	2.43
Road 9	Access to East Granite	16	3814	1.40
Road 10	Buckskin to North Granite	23	8254	4.36 **
Road 11	Klondike Gold to Briggs Quarry	20	4740	2.18
Road 12	Windridge Rubble to Mahagany Draw (pro)	18	1900	0.79 **
	Autumn Gold to Buckskin - misaligned	18	5280	2.18 ****
	TOTAL ROAD ACREAGE			28.49 *****
	Windridge Rubble to Mahagany Draw (pro) Autumn Gold to Buckskin - misaligned	18	1900	0.79 ** 2.18 ****

		Acrea	ge - dist.	Ouside
Quarry Pits		approved	current appr	oved area
Ca	amp	1.66	1.66	*
Ar	ntique White	1.74	1.29	
Au	utumn Gold	16.78	11.08	1.15
As	spen Frost / Klondike Gold	7.96	8.53	3.39
Bu	uckskin	3.91	6.92	4.41
Lit	ttle Heart	1.93	0.88	
W	indridge Rubble	1.12	0.87	
No	orth Granite	3.52	0.87	
Ea	ast Granite	2.12	2.12	
W	est Granite	0.47	0.47	
Sc	outh Granite	0.4	0.4	
TO	OTAL QUARRY DISTURBANCES	41.61	35.09	8.95 *****

### Notes

- \* 9.06 acres of this road and 1.66 acre camp area approved for post mining land use.
- \*\* Roads constructed wider than originally approved thus increase in road acreage.
- \*\*\* Road not in original approval
- \*\*\*\* 2.18 acres of road reclaimed and release in 2001
- \*\*\*\*\* 24.71 acres of road originally approved. 3.78 acres of road disturbances not approved. Currently, 25.52 acres of road disturbed, .79 acres of road approved but not constructed,. 2.18 acres of road reclaimed and released.
- \*\*\*\*\*\* 8.95 acres of quarry disturbance outside current approved plan.

Total Disturbances for this Project:	app.2001	current acres
Quarries to be reclaimed	39.95	48.9
Roads to be reclaimed	15.65	17.25
reclamation variance (roads and camp)	10.72	10.72
reclaimed road (2001)		2.18
TOTAL	66.32	79.05

Need to adjust reclamation surety to cover 48.90 acres of quarry and 17.25 acres of roads.































